

## **REMARKS**

The Office Action dated December 26, 2007 has been reviewed and carefully considered. Claims 1-9 remain pending. Claim 10 has been canceled without prejudice. Claims 1 and 8-9 are the independent claims. Reconsideration of the above-identified application, as amended and in view of the following remarks, is respectfully requested.

The drawings stand objected to because “the unlabeled rectangular boxes shown in the drawings should be provided with descriptive text labels.” In response, replacement sheets have been provided for Figs. 1 and 3. Accordingly, Applicant respectfully requests removal of the objection.

Claims 4-7 stand objected to under 35 CFR 1.75(c) as being in improper form due to multiple dependent claims depending from one another. In response, claims 4-7 have been amended so as not to depend from another multiple dependent claim. Applicant respectfully requests removal of these objections.

Claims 1, 8-10 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Applicants respectfully disagree. With respect to claim 10 however, to further allowance of the present application, claim 10 has been canceled without prejudice.

With respect to claims 1 and 9, claim 1 recites a method of synthesizing a signal and claim 9 recites a computer system, both of which clearly fall within the statutory categories of a process, machine manufacture, or composition of matter... and perform a useful, concrete and tangible result. Applicants submit that claim 8 as amended recites functional descriptive material as it consists of data structures which impart functionality when employed by a computer component. It is well settled that nonfunctional descriptive material, such as music, art, and mere arrangements or compilations of facts or data, are merely stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer (see for example, USPTO 2005 Examination Guidelines for Computer-Related Inventions). Amended claim 8 clearly recites data being stored on a computer-readable storage medium, which data imparts function to a computing device. Accordingly, it is respectfully submitted that the claims 1, 8-9 are allowable subject matter under 35 USC §101.

Claims 1 and 8 stand rejected under 35 USC §112, first paragraph, as based on a disclosure which is not enabling. Applicants respectfully disagree. The Office Action indicates that the claim limitation of “determining a required pitch bell location in the domain of the signal to be synthesized, b) mapping the required pitch bell location onto an original signal to provide a first pitch bell location” are not enabled. Applicants submit that these features are clearly enabled in the disclosure. For example, at least on page 3, lines 3-11, the above limitations are described in such a way as one skilled in the art would be able to practice. The Office Action further points to Fig. 2 to add limitations

into claim 1 and 8 that it believes to be critical or essential. Applicants further respectfully disagree and note that Fig.2 is but one illustrative examples of the present invention and one skilled in the art would be able to make various changes and modifications therein without departing from the spirit and scope of the present invention as defined in claims 1 and 8. Accordingly, Applicants request removal of these rejections.

Claims 1, 3 and 8-10 stand rejected under 35 USC §103(a) as being unpatentable over Singhal, U.S. Patent No. 6,963,833, in view of Koezuka, U.S. Patent No. 6,801,898. Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Singhal in view of Koezuka and further in view of Kagoshima et al., US Patent No. 5,890,118.

A claimed invention is prima facie obvious when three basic criteria are met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings therein. Second, there must be a reasonable expectation of success. And, third, the prior art reference or combined references must teach or suggest all the claim limitations.

Applicants respectfully submit that Singhal and Koezuka, alone or in combination, fail to teach all of the limitations of claim 1. Independent claims 8-9 recites similar limitations.

The Office Action points to col. 14, lines 25-33 of Singhal to show the limitation of “randomly shifting the first pitch bell location to provide a second pitch bell Location...” Applicants respectfully disagree. In this section Singhal simply shows that “a random noise sequence of desired length is generated ... which are uniformly distributed between negative  $\pi$  and  $\pi$ .” Thus, Singhal, in fact, teaches away from the present invention since it does not shift the first pitch bell location but randomly inserts noise in a signal.

Still further the Office Action points to col. 14, lines 25-37 of Singhal to show the limitation of “windowing the original signal on the second pitch bell location to provide a pitch bell...” Applicants respectfully disagree. In this section Singhal simply shows that “random phases are assigned to an actual unvoiced spectral amplitude to get a modified unvoiced speech spectrum. Thus, Singhal does not window the original signal on the second pitch bell location..., as in the present invention.

The Office fails to address the limitation of “placing the resulting pitching bell at the required pitch bell location in the domain of the signal to be synthesized.” Applicant request the Examiner address this limitation.

As indicted in the Office Action, Singhal fails to teach that the mapping of the required pitch bell location onto an original signal to provide a first pitch bell location. The addition of Koezuka fails to cure the infirmities of Singhal.

Having shown that the combined device resulting from the teachings of the cited references does not include all the elements of the present invention, Applicant submits that the reasons for the Examiner's rejections of the claims have been overcome and can no longer be sustained. Applicant respectfully requests reconsideration, withdrawal of the rejection and allowance of the claims.

In the matter of obviousness there is a great emphasis placed on "the importance of the motivation to combine." For example, the court in Yamanouchi Pharmaceutical Co. v. Danbury Pharmacal, Inc., 231 F. 3d. 1339, 56 USPQ2d. 1641, 1644 (Fed. Cir. 2000) found that:

an examiner ... may often find every element of a claimed invention in the prior art. If identification of each claimed element of the prior art was sufficient to negate patentability, very few patents would ever issue. Furthermore rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner ... to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention ... To counter this potential weakness in the obviousness construct, the suggestion to combine requirements stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness. *id.* quoting *In re Rouffet*, 149 F.3d 1350, 1357-58, 47 USPQ 2d 1453, 1457 (Fed. Cir. 1998)

In this case, Applicants believe that with regard to the referred-to claims, the Examiner has also impermissibly incorporated the teachings of the present invention in the cited reference to reject the claims. Accordingly, Applicants submit that the reasons for the Examiner's rejections of the claims have been overcome and the rejection can no

longer be sustained. Applicants respectfully request reconsideration, withdrawal of the rejection and allowance of the claims.

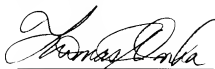
In view of the foregoing discussion, the Office Action has failed to make out a *prima facie* case of obviousness, instant independent claim 1 is allowable, and the rejection should be withdrawn. Independent claims 8-9 recited similar features and are deemed patentable for the same reasons.

Claims 2-7 are dependent from claim 1 discussed above, and are believed allowable for at least the same reasons and any rejections thereof should be withdrawn. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Thomas J. Onka', written over a horizontal line.

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